

V. Remarks**A. Amendments to the Specification**

The Action objects to the disclosure because of its recital of Ta₂O₅ twice in Paragraph 19. Paragraph 19 has been amended to correct this error. Reconsideration and withdrawal of this rejection are requested.

Paragraph 17 has been amended to correct "PRO" to "RPO" layer 230, consistent with its usage in Paragraph 14.

Paragraph 24 has also been amended to correct the tense of the word "perform."

B. Amendments to the Drawings

The Action objects to the drawings because reference character "213" has been used to designate both spacers and salicide regions. Applicant submits that this error occurred only in FIG. 2B and has been corrected by the amendment to FIG. 2B describe above. Reconsideration and withdrawal of this rejection are requested.

FIG. 2C has also been amended as described above.

C. Claims**1. Claim Amendments**

Claim 14 has been amended to add a comma as shown.

Withdrawn Claims 24-38 have been canceled.

New Claims 39-52 have been added, examination of which is requested.

2. Claim Rejections

Applicant is grateful to the Examiner for allowing Claims 14-23 and for recognizing the allowable subject matter in dependent Claims 2-7 and 13. Reconsideration and withdrawal of the rejection of the remaining claims are requested in view of the following arguments.

(a) Rejection under 35 USC § 102(b)

The Action rejects Claims 1 and 12 as being anticipated by U.S. Published Application No. 2001/0024854A1 to Takeuchi et al. ("Takeuchi"). Independent Claim 1 is directed to a method of forming a one-transistor memory cell comprising steps (a)-(d). In step (c), Claim 1 recites that a capacitor dielectric layer is formed on sidewalls of the opening formed in step (b) and on the exposed portion of the substrate. An electrode layer is then formed over the capacitor dielectric layer, i.e., the dielectric layer of the formed memory capacitor of the memory cell. Applicant submits, as argued hereafter, that this step is not taught or suggested by Takeuchi.

Takeuchi forms sidewall spacers 15 (FIG. 2E) from deposited silicon oxide film layer 14 (FIG. 2A) in the opening 13. Polysilicon layer 16 is then deposited (FIG. 2E) and patterned to form bottom electrode 21 (FIG. 3A). A capacitor dielectric layer 22 is then formed over the lower electrode 21, followed by formation of the top electrode 23. (FIG. 3C; Paragraph 42). Therefore, spacers 15 are clearly not the capacitor dielectric layer of the capacitor of Takeuchi. Rather, Takeuchi clearly discloses that the device of Takeuchi includes a "memory capacitor in which a storage node electrode 21 (a lower electrode) and a cell plate electrode 23 (an upper electrode) are opposed to each other and **capacitive-coupled through a dielectric film 22**. (Paragraph 35 (Lines 16-19) (Emphasis Added)).

Therefore, because Takeuchi does not form the capacitor dielectric layer of its memory cell as recited in step (c) of Claim 1, Claim 1 is not anticipated by the cited reference and, it is submitted, is allowable. Claims 2-13 depend from Claim 1 and are also not anticipated. Reconsideration and withdrawal of the rejection and objections to these claims are requested.

(b) Claim rejection under 35 USC § 103

PATENT

ATTORNEY DOCKET NO.: N1085-00128

EXPRESS MAIL LABEL NO. EV516214325US

[TSMC2002-1104]

The Action rejects Claims 8-11 as being obvious from Takeuchi in view of several references. Claims 8-11 depend from Claim 1 and are, therefore, allowable for at least the reasons set forth in connection therewith. Reconsideration and withdrawal of the rejection of these claims are respectfully requested.

3. New Claims 39-52

New Claims 39-52 have been added. Examination and allowance of which are respectfully requested.

PATENT

EXPRESS MAIL LABEL NO. EV516214325US

ATTORNEY DOCKET NO.: N1085-00128

[TSMC2002-1104]

VI. Conclusion

In view of the foregoing remarks and amendments, Applicant submits that this application is in condition for allowance at an early date, which action is earnestly solicited.

The Commissioner for Patents is hereby authorized to charge any additional fees or credit any excess payment that may be associated with this communication to deposit account **04-1679**.

Respectfully submitted,

Dated: 1/26/05



Joseph A. Powers, Reg. No.: 47,006
Attorney For Applicant

DUANE MORRIS LLP
One Liberty Place
Philadelphia, Pennsylvania 19103-7396
(215) 979-1842 (Telephone)
(215) 979-1020 (Fax)

PATENT

ATTORNEY DOCKET NO.: N1085-00128

EXPRESS MAIL LABEL NO. EV516214325US

[TSMC2002-1104]

IV. Amendments to the Drawings

FIGS. 2B and 2C have been amended by submission of replacement sheets.

FIG. 2B has been amended to correct a use of reference 212 to point to a spacer element. This use of "212" has been corrected to "213". Support for this amendment is shown in the correct usage of FIGS. 2D to 2G.

FIG. 2C has been amended to correct a use of reference 213 to point to a salicide region. This use of "213" has been corrected to "216". Support for this amendment is shown in the correct usage of FIGS. 2D to 2G.